

UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/736,644	12/17/2003	Hiroyuki Ogi	118118	3825	
25944	7590 12/30/2004		EXAM	EXAMINER	
OLIFF & BERRIDGE, PLC			LE, DA	LE, DANG D	
P.O. BOX 19928 ALEXANDRIA, VA 22320			ART UNIT	PAPER NUMBER	
ALEXANDIC	1, 111 22320		2834		
		DATE MAILED: 12/30/200-	DATE MAILED: 12/30/2004		

Please find below and/or attached an Office communication concerning this application or proceeding.

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. 1 If the MAILING DATE OF THIS COMMUNICATION. 2 If the MAILING DATE OF THIS COMMUNICATION. 1 If the period for regly specified above is lists share they (30) days, a neply which the statubory invinitum of birty (30) days will be considered timely. 1 If the period for regly specified above is lists than they (30) days, a neply which the statubory invinitum of birty (30) days will be considered timely. 1 If NO period for regly specified above is lists than they (30) days, a neply which the statubory invinitum than the resting date of this communication of the period of the period for reply will, by admit of the period for reply will, and the period for reply p				$1\times$				
## Dang D.Le - The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. • Entertainties of time may be evaluated under the provisione of 37 CFR 1.736(s). In no event, however, may a right be timely filled • If the period for ringly is a specified above, the reason of 37 CFR 1.736(s). In no event, however, may a right be timely filled • If the period for ringly specified above, the reason and the statutory priorities of this communication of this communication of the statutory priorities of the statutory priorities of this communication. Provided the statutory priorities and the stat	·	Application No.	Applicant(s)	M				
Dang D.Le - The MALLING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. If the period for reply specified shore is less than they (30) says, a reply within the statutory minimum of binty (30) days with be considered timely. If the period for reply specified shore is less than they (30) says, a reply within the statutory minimum of binty (30) days with be considered timely. If the period for reply specified shore is less than they (30) says, a reply with the statutory minimum of binty (30) days with be considered timely. If the period for reply specified shore is less than they (30) says, a reply with the statutory minimum of binty (30) days with be considered timely. If the period for reply specified shore is less than they can be considered timely. If the period for reply specified shore is less than they (30) says, a reply with the statutory minimum of binty (30) days with be considered timely. If the period for reply specified shore is less than they (30) says, a reply with the statutory minimum of binty (30) days with be considered timely. If the period for reply specified shore is less than they (30) says, and the statutory minimum of binty (30) days with be considered timely. A prophy received by the Office later than they (30) says, and the statutory minimum of binty (30) says are less of the scanning and the statutory minimum of binty (30) says with be considered timely. A prophy received by the Statutory has been seen than they (30) says and the considered timely. A policial time specified statutory is a statutory in the statutory in the statutory is say and the statutory in the statutory is say and the statutory		10/736,644	OGI, HIROYUKI					
The MAILING DATE of this communication appears on the cover sheet with the correspondence address — Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ② MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. Examinous of time mylo be available under the provisions of 3 CPR 1.136(a). In no event, however, may a reply be timely filled to the provisions of 3 CPR 1.136(a). In no event, however, may a reply be timely filled to the provision of 3 CPR 1.136(a). In no event, however, may a reply be timely filled to the provision of the provision of 3 CPR 1.136(a). In no event, however, may a reply be timely filled to 1.11 the period for reply specified above to less them thing (30) days, and specified to the provision of the period of the provision of the period of the peri	Office Action Summary	Examiner	Art Unit					
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Ederations of time may be available under the provisions of 37 CFR 1.136(s). In no event, however, may a reply be timely filed - Ederation of time may be available under the provisions of 37 CFR 1.136(s). In no event, however, may a reply be timely filed - If NO period for reply septide above, the maximum statutory period will apply and will expire SIX (d) MOXITIS from the mailing date of this communication. It is the previous of reply septide in septide to reply septide after than three monitors after the mailing date of the communication. Any reply received by the Office that than three monitors after the mailing date of the communication, even if timely filed, may reduce they septimized the replaced by the Office that that three monitors after the mailing date of the communication, even if timely filed, may reduce they septimized the reduced they communication is non-final. 3) □ Responsive to communication(s) filed on		Dang D Le	2834					
THE MAILING DATE OF THIS COMMUNICATION. Eadersload or time may be available under the provision of 37 CPR 1.136(d). In no event, however, may a righty be timely filled after SIX (8) MONTHS from the mailing date of this communication. Fallur SIX (8) MONTHS from the mailing date of this communication of the communication o	The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the	correspondence addre	ess				
1) Responsive to communication(s) filed on	 THE MAILING DATE OF THIS COMMUNICATION. Extensions of time may be available under the provisions of 37 CFR 1.1: after SIX (6) MONTHS from the mailing date of this communication. If the period for reply specified above is less than thirty (30) days, a reply. If NO period for reply is specified above, the maximum statutory period versillure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing 	36(a). In no event, however, may a reply be to ywithin the statutory minimum of thirty (30) da will apply and will expire SIX (6) MONTHS from the application to become ABANDON	mely filed ys will be considered timely. n the mailing date of this comr ED (35 U.S.C. § 133).	nunication.				
2a) This action is FINAL. 2b) This action is non-final. 3 Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4	Status							
2a) This action is FINAL. 2b) This action is non-final. 3 Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4	1) Responsive to communication(s) filed on							
closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4)								
Aly Claim(s) 1-8 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) □ The drawing(s) filed on 17 December 2003 is/are: a) □ accepted or b) □ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) □ The oath or declaration is objected to by the Examiner: Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☑ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☑ All b) □ Some * c) □ None of: 1. ☑ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) ☑ Notice of References Cited (PTO-1449 or PTO/5B/08) 5) □ Notice of Informal Papert Application (PTO-152)	3) Since this application is in condition for allowar	nce except for formal matters, pr	osecution as to the m	nerits is				
4) Claim(s) 1-8 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) is/are rejected. 7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filled on 17 December 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). *See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) Outcoments have been received. 4) Interview Summary (PTO-413) Paper No(s)/Mail Date. Paper No(s)/Mail Date. Statement(s) Paper No(s)/Mail Date. Stocked of Interview Paper No(s)/Mail Date. Stocked of Interview PTO-152)	closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 4	53 O.G. 213.					
4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) ☒ Claim(s) is/are rejected. 7) □ Claim(s) is/are objected to. 8) □ Claim(s) is/are objected to. 8) □ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) □ The specification is objected to by the Examiner. 10) ☒ The drawing(s) filed on 17 December 2003 is/are: a) □ accepted or b) ☒ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) □ Some * c) □ None of: 1. ☒ Certified copies of the priority documents have been received. 2. □ Certified copies of the priority documents have been received in Application No 3. □ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☒ Notice of Partsperson's Patent Drawing Review (PTO-948) 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) □ Notice of Informal Patent Application (PTO-152)	Disposition of Claims							
5) ☐ Claim(s) is/are allowed. 6) ☐ Claim(s) is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) is/are objected to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☒ The drawing(s) filed on 17 December 2003 is/are: accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner: Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) ☐ Some * c) ☐ None of: 1. ☒ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☒ Notice of Partsperson's Patent Drawing Review (PTO-948) 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) ☐ Notice of Informal Patent Application (PTO-152)	4)⊠ Claim(s) <u>1-8</u> is/are pending in the application.							
6) ☐ Claim(s) 1-8 is/are rejected. 7) ☐ Claim(s) is/are objected to. 8) ☐ Claim(s) are subject to restriction and/or election requirement. Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☒ The drawing(s) filed on 17 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner: Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) ☐ Some * c) ☐ None of: 1. ☒ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☒ Notice of Praftsperson's Patent Drawing Review (PTO-948) 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) ☐ Notice of Informal Patent Application (PTO-152)	4a) Of the above claim(s) is/are withdraw	wn from consideration.						
7) Claim(s) is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 17 December 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner: Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/S8/08)	5) Claim(s) is/are allowed.							
Application Papers 9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 17 December 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner: Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/S8/08)	6)⊠ Claim(s) <u>1-8</u> is/are rejected.	_						
Application Papers 9) ☐ The specification is objected to by the Examiner. 10) ☒ The drawing(s) filed on 17 December 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner: Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) ☐ Some * c) ☐ None of: 1. ☒ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☒ Notice of References Cited (PTO-892) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) ☐ Notice of Informal Patent Application (PTO-152)	7) Claim(s) is/are objected to.	☐ Claim(s) is/are objected to.						
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 17 December 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner: Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) Notice of Informal Patent Application (PTO-152)	8) Claim(s) are subject to restriction and/or							
10) ☐ The drawing(s) filed on 17 December 2003 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☐ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date 5) ☐ Notice of Informal Patent Application (PTO-152)	Application Papers							
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some colon None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	9)☐ The specification is objected to by the Examine	r.	-					
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	10)⊠ The drawing(s) filed on <u>17 December 2003</u> is/are: a) accepted or b)⊠ objected to by the Examiner.							
11) ☐ The oath or declaration is objected to by the Examiner: Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) ☒ All b) ☐ Some * c) ☐ None of: 1. ☒ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☒ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).							
Priority under 35 U.S.C. § 119 12) △ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) △ All b) ☐ Some * c) ☐ None of: 1. △ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) △ Notice of References Cited (PTO-892) 2) ☐ Notice of Praftsperson's Patent Drawing Review (PTO-948) 3) △ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is ob	jected to. See 37 CFR	1.121(d).				
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)	11) The oath or declaration is objected to by the Ex	caminer: Note the attached Office	Action or form PTO	-152.				
a) ⊠ All b) ☐ Some * c) ☐ None of: 1. ☑ Certified copies of the priority documents have been received. 2. ☐ Certified copies of the priority documents have been received in Application No 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) ☑ Notice of References Cited (PTO-892) 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) ☑ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 5) ☐ Notice of Informal Patent Application (PTO-152)	Priority under 35 U.S.C. § 119							
* See the attached detailed Office action for a list of the certified copies not received. Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) * See the attached detailed Office action for a list of the certified copies not received. 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152)	 a) All b) Some * c) None of: 1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority 	s have been received. s have been received in Applicat rity documents have been receiv	ion No	age				
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152)		• • • • • • • • • • • • • • • • • • • •	ed					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152)	The state of the s	e. a.e cermina dopide flot fooely						
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152)	Attachment(s)							
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application (PTO-152)	1) Notice of References Cited (PTO-892)	4) Interview Summan	/ (PTO-413)					
	2) Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail D	ate	5 0\				
			-атент Аррисацоп (РТО-1)	J4)				

Art Unit: 2834

DETAILED ACTION

Drawings

1. Figure 11 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 112

- The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 3. Claims 1-8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Regarding claim 1, Figures 3, 4, 9, and 10 show only one pair of parallel connected two elements (55y1 and 55y3 in Figure 9, for example) and the remainders are constituted of a single element. This seems to contradict to the limitation recited at the last portion in claim 1.

Claim Rejections - 35 USC § 102

Art Unit: 2834

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Scott et al. (5,929,611).

Regarding claims 1 and 4, Scott et al. shows an ac generator for a vehicle comprising:

- A rotor (220) for providing a magnetic field;
- A stator (210), disposed around said rotor, said stator having a stator core in which a plurality of phase-windings is mounted to generate electromotive force when the magnetic field is supplied; and
- A rectifying unit (706, Figure 7C) formed by a bridge circuit which includes
 positive electrode side rectifying elements and negative electrode side
 rectifying elements respectively connected to the plurality of phase-windings;
- Wherein one of the positive electrode side rectifying element and negative
 electrode side rectifying element connected to at least a portion of the
 plurality of phase-windings is constituted of a single element (portion 702) and
 the remainders are constituted of parallel connected two elements (portion
 704).
- 6. Claims 1 and 4 are rejected under 35 U.S.C. 102(b) as being anticipated by Frister (4,383,215).

Art Unit: 2834

Regarding claims 1 and 4, Frister shows an ac generator for a vehicle comprising:

A rotor (not shown) for providing a magnetic field;

- A stator, disposed around said rotor, said stator having a stator core in which
 a plurality of phase-windings (PHW) is mounted to generate electromotive
 force when the magnetic field is supplied; and
- A rectifying unit (Figure) formed by a bridge circuit which includes positive
 electrode side rectifying elements and negative electrode side rectifying
 elements respectively connected to the plurality of phase-windings;
- Wherein one of the positive electrode side rectifying element and negative
 electrode side rectifying element connected to at least a portion of the
 plurality of phase-windings is constituted of a single element and the
 remainders are constituted of parallel connected two elements (ZSD1 and
 right HGR, ZSD2 and left HGR).
- 7. Claims 1-4 are rejected under 35 U.S.C. 102(b) as being anticipated by Domann (3,571,657).

Regarding claim 1, Domann shows an ac generator for a vehicle comprising:

- A rotor (not shown) for providing a magnetic field;
- A stator, disposed around said rotor, said stator having a stator core in which a plurality of phase-windings (U, V, W) is mounted to generate electromotive force when the magnetic field is supplied; and

 A rectifying unit (Figure 1) formed by a bridge circuit which includes positive electrode side rectifying elements and negative electrode side rectifying elements respectively connected to the plurality of phase-windings;

Wherein one of the positive electrode side rectifying element and negative
electrode side rectifying element connected to at least a portion of the
plurality of phase-windings is constituted of a single element (9, 11, 13) and
the remainders are constituted of parallel connected two elements (8, 10, 12
with 23).

Regarding claims 2-4, it is noted that Domann also shows the zener diodes (12, 13) and the normal diodes (8-11 and 23).

Claim Rejections - 35 USC § 103

- 8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 9. Claims 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Domann in view of Ooiwa et al. (6,184,602) and Drabik (3,739,209).

Regarding claims 5-8, Domann shows all of the limitations of the claimed invention except for the small and large diameters and the plurality of heat sinks.

Ooiwa et al. shows the heat sink with small and larger diameter (501and 503, Figure 1) for the purpose of reducing more heat.

Art Unit: 2834

Drabik shows the plurality of heat sinks (42, 44, 46) also for the purpose of reducing more heat.

Since Domann, Ooiwa et al., Drabik are all from the same field of endeavor; the purpose disclosed by one inventor would have been recognized in the pertinent art of the others.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to make the heat sinks with different diameter and to use many heat sinks as respectively taught by Ooiwa et al. and Drabik for the purpose discussed above.

Information on How to Contact USPTO

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dang D Le whose telephone number is (571) 272-2027. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2044. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2834

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

12/21/04

DANG LE

Sang L. h